REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

In response to the rejection of claims 22-37 under 35 U.S.C. §112, second paragraph, as allegedly being incomplete for omitting essential elements, claims 22 and some of the dependent claims as well have been amended so as to ensure recitation of structural elements that comprise the system. Clearly the limitations of claim 22 are more than mere non-functional descriptive data. Claim 22 has been amended so as to specifically require a distribution server including means for maintaining a tree of nodes in accordance with specific functional recitations. The applicant is entitled to claim apparatus in this manner under 35 U.S.C. §112, paragraph six.

Accordingly, all outstanding formality-based issues are now believed to have been overcome in the applicant's favor.

The rejection of claims 1-16 and 21-45 under 35 U.S.C. §102 as allegedly anticipated by Dondeti '188 is respectfully traversed.

Dondeti describes a multicasting process which supports many-to-many communications. It does not however teach or suggest the applicant's claimed invention.

Using claim 1 as an example, there is first of all no disclosure or suggestion in Dondeti of the determination of an offset from a key of a previous node. Instead the binary ID (which the examiner identifies as being the equivalent in paragraph 11 on page 3 of the office action) is stated in column 3 line 29, as simply "assigned" to the member. This is repeated in column 4, line 22. Furthermore, the purpose of such binary IDs is to "define key associations for each member" (column 3 line 30). It is not used, like the offset of the present invention of claim 1, to "[generate] the updated first key of each node".

Dondeti's blinded key (e.g. column 2 lines 46 to 48) might have been a better analogy to the offset of the present application--but it is also deficient as was apparently already recognized by the Examiner.

The Dondeti root key, which is used to encrypt the data to be sent, is generated by use of various secret keys, blinded keys and unblinded keys, as set out in, e.g., column 4, line 4 onwards, also column 5, lines 51 onwards (please see also the flowchart of Figure 6). This process is different from the applicant's claimed method and apparatus - and what is perhaps more significant is that the resulting keys generated by Dondeti all need to be encrypted before they are transmitted (see column 5, lines 64 and 65, and also step 76 in the flowchart of Figure 6, specifically with regard to the blinded key). Thus it is not possible in the Dondeti method to broadcast the equivalent of applicant's offset (which is used to generate the updated keys) in an unencrypted form as is claimed in, e.g., claim 1.

The word "broadcast" which appears in Dondeti at column 4, line 39 refers not to the transmission of the binary ID nor of keys. If one reads the entire sentence in Dondeti, it will be noted that Dondeti is referring to the broadcast of "member status messages," in connection with the keeping track of members of a key transmission group (his invention being concerned, after all, with member joinings and leavings). In any event, Dondeti seems to teach against broadcasting ("undesirable") for its generation of "excessive network traffic" which was criticized as a problem in the prior art discussion in the background section. Please see column 4 lines 37 to 42.

Similar comments apply to applicant's independent claim 22. Additionally, it does not seem that Dondeti discloses or suggests anywhere that two one-way functions should be used. Certainly, nothing like the Dondeti binary ID is used to derive the first key of parent nodes.

As for independent claim 38, Dondeti does not (at the sections identified by the examiner nor anywhere else), disclose or suggest that an encryption key includes "a join field and a leave field."

Given such fundamental deficiencies with Dondeti with respect to the above-discussed features of the independent claims, it is not believed necessary at this time to explain the further deficiencies of this reference with respect to other features of the rejected independent and/or dependent claims. Suffice it to note that, as a matter of law, it is impossible for a reference to anticipate any claim unless it teaches each and every feature of that claim.

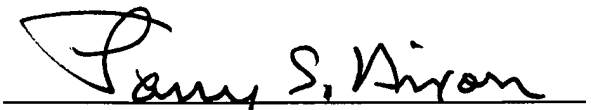
The rejection of claims 17-20 under 35 U.S.C. §103 as allegedly being made "obvious" based on Dondeti taken alone is also respectfully traversed.

Fundamental deficiencies of Dondeti have already been noted above with respect to parent claim 1. As the Examiner admits, Dondeti also fails to teach the additional recitations of these rejected dependent claims. The Examiner alleges that one of only ordinary skill in the art "could have tried..." Of course, that is not an appropriate test for obviousness under 35 U.S.C. § 103. Obviousness must be determined based on prior art teachings alone without any suggestion whatsoever from the applicant's own teaching. In any event, Dondeti has fundamental deficiencies as already noted above and accordingly it is clear that those having only ordinary skill in the art would never have found it "obvious" to even try the additional features of the rejected claims.

Accordingly, this entire application is now believed to be in allowable condition and a formal notice to that effect is respectfully solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 

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